

(19)



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(11)

EP 0 798 778 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
01.07.1998 Bulletin 1998/27

(51) Int. Cl.<sup>6</sup>: H01L 21/768, H01L 23/522

(43) Date of publication A2:  
01.10.1997 Bulletin 1997/40

(21) Application number: 97105040.6

(22) Date of filing: 25.03.1997

(84) Designated Contracting States:  
DE FR GB

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(30) Priority: 25.03.1996 JP 67627/96

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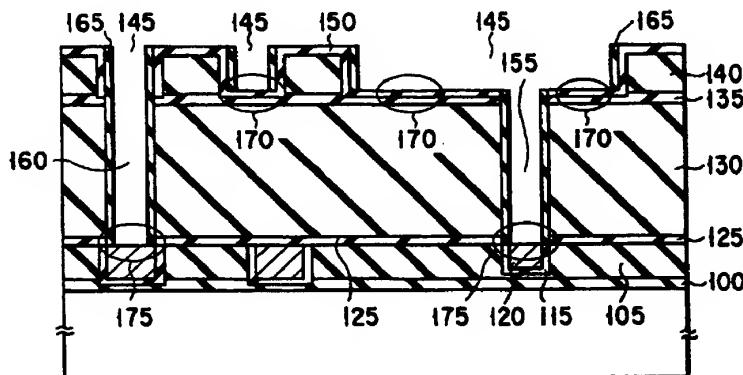
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### (54) Method of manufacturing a semiconductor device of multilayer wire structure

(57) In a method of manufacturing a semiconductor device, when a copper diffusion preventing film portion (165) on the connecting hole bottom portion (145, 155) is to be removed, a film thickness of other portion of the copper diffusion preventing film (165) not to be removed is more thickly formed than that of the to-be-removed copper diffusion preventing film portion on the connecting hole bottom portion, thereby only the copper diffu-

sion preventing film portion to be removed can be removed. The method can extend a durable length of time of a wire and can reduce a resistance of the metal wires in a connecting hole bottom portion by removing a copper diffusion preventing film (165) on the bottom portion of the connecting hole (145, 155).



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## EUROPEAN SEARCH REPORT

Application Number

EP 97 10 5040

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 5 281 850 A (KANAMORI JUN) * column 2, line 50 - column 4, line 26 * * figures 1A-1F * ---	1-30	H01L21/768 H01L23/522
A	EP 0 571 108 A (SGS THOMSON MICROELECTRONICS) * column 1, line 53 - column 3, line 15 * * figures 1-4 * ---	1-30	
A	CA 2 082 771 A (HO VU Q ; JOLLY GURVINDER (CA); EMESH ISMAIL T (CA); NORTHERN TELEC) ---		
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	27 April 1998	Schuermans, N	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			